Amendments to the Specification

- Please replace the paragraph beginning at page 5, line 11 with the replacement paragraph set forth below.

Referring to Figure 2, one of the simplest embodiments of the invention is a circuit that includes a shunt capacitor realized by a closed conductive loop 200 and a transmission line 210 attached to the loop 200. The transmission line 210 in this case is connected to the loop 200 at two nodes 240 and 250. The loop 200 can thus be viewed as including two segments 220 and 230 of transmission lines connected in parallel at the nodes 240 and 250. One of the transmission lines 230 (labeled "Short transmission line") has nearly zero, but not zero, electrical length, while the other 220 (labeled "Long transmission line") has a larger electrical length selected to approximate the desired capacitance. The electrical length of the transmission line 200 is realized by selection of the physical width and length of the line. The longer segment 220 preferably has a substantially higher impedance than the shorter segment 230.

- Please replace the paragraph beginning at page 5, line 21 with the replacement paragraph set forth below.

Referring to Figures 3 ~~and 4~~, the principles of the invention can be illustrated as follows. (It should be noted that "+" and "-", as used in Figures 3 and 4, refer to the polarity of the voltages V (Figure 3), V1 (Figure 4), and V2 (Figure 4), respectively.) From Figure 3, which shows the equivalent circuit of an ideal shunt capacitor with a capacitance C and a voltage V across it, one has

$$I_2 = I_1 - I_3 \qquad (1)$$

where I_3 (Figure 3) is the current following through C from node 1 to ground. That is, the output current I_2 is the difference between input current I_1 and I_3 (Figure 3) of capacitor C.

- Please replace the paragraph beginning at page 6, line 14 with the replacement paragraph set forth below.

Comparing Equations (1) and (2), one may select appropriate length and impedance of the long transmission line 220, such that

$$(I_{L1} - I_{L2}) \approx I_3 \qquad (3)$$

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at a given frequency or frequency band of interest ("I_3" refers to the current identified in Figure 3). The result is a closed conductive loop that electrically behaves substantially like a patch shunt capacitor.